INDIVIDUAL TRAINING STANDARDS

1. <u>General</u>. This enclosure contains all of the ITSs for this OccFld, grouped by MOS. Each MOS is contained in a separate Appendix to Enclosure (6).

2. <u>Format</u>. For each ITS, the following elements of information are provided:

    a. <u>TASK</u>. The task describes a specific and necessary behavior expected of a Marine in a particular MOS or billet. It is a clearly stated, performance-oriented action requiring a learned skill. Skills that "make" a Marine or qualify that Marine for the appropriate MOS are designated as "Core." Those advanced skills that are mission, grade, or billet specific are designated as "Core Plus."

    b. <u>CONDITION(S)</u>. This portion of the ITS describes the equipment, manuals, assistance/supervision, special physical demands, environmental conditions, and location affecting a Marine's performance of the task under real-world circumstances.

    c. <u>STANDARD(S)</u>. This portion of the ITS describes the level of proficiency to which the individual must perform the task.

    d. <u>PERFORMANCE STEPS</u>. Collectively, the performance steps represent the logical sequence of actions required of the Marine to perform the task to standard. These actions are typically detailed in the references.

    e. <u>INITIAL TRAINING SETTING</u>. All ITSs are assigned an initial training setting that includes a specific location for initial instruction [Functional Learning Center (FLC) or Managed On-The-Job Training (MOJT)], a sustainment factor (number of months between evaluation or retraining to maintain the proficiency required by the standard), and a "Required By" grade (the lowest grade at which task proficiency is required).

    f. <u>REFERENCE(S)</u>. References are doctrinal publications, technical manuals, and other publications upon which the ITS and its performance steps are based. They should be readily available and provide detail to the procedures that are only summarized in the performance steps.

    g. <u>TRAINING MATERIEL (Optional)</u>. Training materiel includes all training devices, simulators, aids, equipment, and materials [except ammunition, distance learning (DL) products, and performance support tools (PST)] required or recommended to properly train the task under the specified conditions and to the specified standard. Mandatory items are preceded by an asterisk(*).

    h. <u>AMMUNITION (Optional)</u>. This table, if present, depicts the ammunition, explosives, and/or pyrotechnics required for proper training of the ITS.

    i. <u>DISTANCE LEARNING PRODUCT(S) (Optional)</u>. This section includes a list of any currently available or planned DL products designed to provide training related to this task.

    j. <u>PERFORMANCE SUPPORT TOOL(S) (Optional)</u>. This section includes a list of any currently available or planned PSTs designed to provide training related to this task.

    k. <u>ADMINISTRATIVE INSTRUCTIONS (Optional)</u>. Administrative instructions provide the trainer/instructor with special required or recommended circumstances, including safety precautions, relating to the training or execution of the task. These instructions may also clarify the meaning of the task.

MOS 0614, UNIT LEVEL CIRCUIT SWITCH OPERATOR

DUTY AREA 01 - PLANNING

For a complete MOS 0614 task list, add appropriate grade-level tasks from MOS 0600, BASIC COMMUNICATION INFORMATION SYSTEMS MARINE and MOS 0612, FIELD WIREMAN to the following tasks.

TASK: 0614.01.01 (CORE PLUS) ASSIST THE UNIT LEVEL CIRCUIT SWITCH (ULCS) PLANNER WITH ULCS PLANNING

CONDITION(S): Provided a requirement for ULCS, a tactical scenario, concept of operations, planning documents, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Indentify interface equipment and cables.

2. Identify highways, channels, and termination number assignments.

3. Consider Line Termination Units (LTU) and modem selection.

4. Switch configuration plan.

5. Consider data base listings.

6. Evaluate Communications Security (COMSEC).

7. Identify any hybrid stacking requirements.

8. Identify bit rate for system.

9. Determine system timing.

10. Determine site selection.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. TM 08439A-12/2-1, Operator and Organizational Maintenance Switchboard, Telephone, Automatic SB-3865(P)/TTC

2. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

DUTY AREA 02 - OPERATION

TASK: 0614.02.01 (CORE) INSTALL THE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

CONDITION(S): Provided a requirement for a Digital Central Office, Telephone, Automatic Switch, a site location, planning documents, tools, equipment, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Adhere to all safety precautions.

2. Install shelter at designated location.

3. Ground equipment.

4. Install electronics equipment.

5. Install radio/wire interface unit (TSEC/KY-90), as required.

6. Connect power and signal cables.

7. Install plug-in items.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

2. TM 08440A-12/2-2, System Interface Manual Central Office Telephone Automatic AN/TTC-42

3. TM 08440A-35/3, Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

1. * AN/TTC-42 Automatic Telephone Central Office

2. Field Cable

3. TSEC/KY-90 Secure Digital Net Radio Interface Unit (SDNRIU)

ADMINISTRATIVE INSTRUCTIONS: High voltage is used in the operation of this equipment. DEATH ON CONTACT may result if personnel fail to observe safety precautions.

TASK: 0614.02.02 (CORE) PERFORM INFORMATION/COMMUNICATIONS SECURITY (INFOSEC/COMSEC) OPERATIONS/INDEX PROCEDURES ON THE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

CONDITION(S): Provided an initialized, installed, Digital Central Office, Telephone, Automatic Switch, and references.

STANDARD(S): To ensure communication security is maintained, per the references.

PERFORMANCE STEPS:

    1. Perform COMSEC Variable Assignment Index procedures to add, change, delete or display assignments.

    2. Perform COMSEC Rekey Management to allow rekeying actions to be performed on either a switch or network basis.

    3. Peform COMSEC Variable Transfer/Purge Control procedures.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

    1. CMS-1_, COMSEC Material System Policy & Procedures Manual

    2. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

    1. AN/TTC-42 Automatic Telephone Central Office

TASK: 0614.02.03 (CORE) PROGRAM COMPACT DIGITAL SWITCH

CONDITION(S): Provided network cutsheets, Enhanced Switch Operator's Position interface, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

    1. Adhere to all safety precautions.

    2. Ground equipment.

    3. Connect power to shelter.

    4. Initialize the Compact Digital Switch.

    5. Establish CBCS-Flood Search Link.

    6. Establish CBCS-DIBTS Link.

    7. Establish CBCS-Deterministic Link.

    8. Establish CBCS-Commercial Link.

    9. Establish CBCS-T1/E1 Link.

    10. Patch a circuit to meet TRANSEC requirements.

    11. Operate the remote call service position.

    12. Distribute key material to meet COMSEC requirements.

13. Establish CBCS-Local subscriber links.

<u>INITIAL TRAINING SETTING</u>: FLC Sustainment: 12 Req By: Pvt

<u>REFERENCE(S)</u>:

1. Applicable Technical Publications/Manuals

2. CJCSM 6231, Joint Tactical Communication Systems Manuals

<u>TRAINING MATERIEL</u>:

1. AN/TTC-42 Automatic Telephone Central Office

<u>TASK</u>: 0614.02.04 (CORE) INITIALIZE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

<u>CONDITION(S)</u>: Provided an installed digital central office, telephone, automatic switch, and references.

<u>STANDARD(S)</u>: Per the references.

<u>PERFORMANCE STEPS</u>:

1. Adhere to all safety precautions.

2. Set Maintainer/Supervisor Position controls in the proper position.

3. Turn on POWER switch on Visual Display Unit (VDU).

4. Ensure the POWER indicator is ON.

5. Press the BOOTSTRAP buttons on the maintenance screens for all processors.

6. Ensure the ROM MODE indicator is ON.

7. Verify that the LOAD indicator on the maintenance PROCESSOR CONTROL panel goes ON.

8. Enter correct 7-digit password using keypad on MAINTAINER/SUPERVISOR CONTROL panel when prompted on the VDU.

9. Answer questions that appear on the VDU screen.

10. Verify that ON-LINE indicator on one of the switch PROCESSOR CONTROL panels is ON and that the other indicator is in STDBY.

11. Initialize Communications Security (COMSEC) equipment.

12. Adjust Voice Orderwire Control Unit (VOCU), as required.

13. Adjust VDU, as required.

<u>INITIAL TRAINING SETTING</u>: FLC Sustainment: 12 Req By: Pvt

Appendix D to
ENCLOSURE (6)

REFERENCE(S):

    1. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

    2. TM 08440A-12/2-2, System Interface Manual Central Office Telephone Automatic AN/TTC-42

    3. TM 08440A-35/3, Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

    1. AN/TTC-42 Automatic Telephone Central Office

ADMINISTRATIVE INSTRUCTIONS: Disregard alarms which occur during initialization. If an alarm occurs, press the ALARM ACK button on the MAINTAINER/SUPERVISOR CONTROL panel and continue.

TASK: 0614.02.05 (CORE) PERFORM OPERATOR TURN-ON OF DIGITAL CENTRAL OFFICE, TELEPHONE AUTOMATIC SWITCH

CONDITION(S): Provided an installed, initialized and fully powered digital central office, telephone automatic switch and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

    1. Adhere to all safety precautions.

    2. Turn on the CSU.

    3. Connect and turn on the KY-68 DSVT.

    4. Install the EOW locally inside the shelter or remotely outside the shelter.

    5. Turn on the Maintainer/Supervisor Position.

    6. Turn on the Printer.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

    1. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

    2. TM 08440A-12/2-2, System Interface Manual Central Office Telephone Automatic AN/TTC-42

    3. TM 08440A-35/3, Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

    1. AN/TTC-42 Automatic Telephone Central Office

TASK: 0614.02.06 (CORE) PERFORM CALL SERVICE ATTENDANT (CSA) OPERATING PROCEDURES ON THE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

CONDITION(S): Provided an installed and initialized Digital Central Ooffice, telephone, automatic switch, an installed Call Service Unit (CSU), and reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Service nonsecure subscriber calls.

2. Establish nonsecure conference calls.

3. Establish a secure conference call between two or more Digital Secure Voice Terminals (DSVT).

4. Dial outgoing calls, as required.

5. Monitor/Release commercial lines, as required.

6. Perform optional calling procedures and functions.

7. Set CSU for unattended mode operation when the operator is not available.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

1. * AN/TTC-42 Automatic Telephone Central Office

2. Call Service Unit

TASK: 0614.02.07 (CORE) OPERATE THE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH UNDER NORMAL CONDITIONS

CONDITION(S): Provided an installed and initialized Digital Central Office, Telephone, Automatic Switch and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Adhere to safety precautions.

2. Operate the Engineering Orderwire (EOW) for both local and remote operation.

3. Operate the EOW control pannel.

Appendix D to
ENCLOSURE (6)

4. Perform maintenance index procedures.

5. Perform security index procedures.

6. Shutdown the AN/TTC-42(V).

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. 29 Code of Federal Regulations, OSHA 1910.1200

2. Applicable Technical Publications/Manuals

3. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

4. TM 08440A-35/3, Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

1. * AN/TTC-42 Automatic Telephone Central Office

TASK: 0614.02.08 (CORE) OPERATE THE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH UNDER EMERGENCY CONDITIONS

CONDITION(S): Provided an installed and initialized Digital Central Office, Telephone, Automatic Switch, an emergency situation, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Perform Call Service Unit (CSU) console emergency operating procedures.

2. Perform supervisor emergency operating procedures.

3. Perform an emergency, generator to generator, power switch-over procedures.

4. Perform extreme temperature procedures.

5. Perform emergency Communications Security (COMSEC) procedures.

6. Perform emergency shutdown procedures.

7. Perform destruction of material to prevent enemy use.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. CMS-1_, COMSEC Material System Policy & Procedures Manual

2. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

3. TM 08440A-35/3, Central Office, Telephone, Automatic AN/TTC-42(V)

TASK: 0614.02.09 (CORE) INSTALL A REMOTE MULTIPLEXER COMBINER (RMC)

CONDITION(S): Provided a RMC, appropriate four-wire terminal equipment, field wire, digital transmission path, planning documents, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Ensure proper connection to a digital transmission system.

2. Connect power supply cord and apply power.

3. Perform equipment self-test.

4. Program circuit cards.

5. Insert Analog Applique Unit (AAU) card to provide digital conversion of analog phones, if necessary.

6. Connect subsriber terminal(s).

7. Perform line check from subscriber equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. Applicable Technical Publications/Manuals

2. TM 5805-12/1, Multiplexer TD-1235(P)/TTC

TRAINING MATERIEL:

1. * Digital Transmission Path

2. * Field Wire

3. * Four Wire Terminal Equipment

4. TD-1234 Multiplexer Combiner

TASK: 0614.02.10 (CORE) PERFORM INITIAL AND ANCILLARY EQUIPMENT TURN ON PROCEDURES FOR A DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

CONDITION(S): Provided an installed Digital Central Office, Telephone, Automatic Switch and references.

Appendix D to
ENCLOSURE (6)

STANDARD(S): Per the references.

PERFORMANCE STEPS:

    1. Adhere to all safety precautions.

    2. Ensure that alternating current (AC) OVERRIDE switch is in the NORMAL AC position.

    3. Turn on the circuit breakers on the circuit breaker panel in their specified order.

    4. Turn on the Front End Assembly and DC/DC converters.

    5. Turn on ancillary equipment.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

    1. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

    2. TM 08440A-12/2-2, System Interface Manual Central Office Telephone Automatic AN/TTC-42

    3. TM 08440A-35/3, Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

    1. * AN/TTC-42 Automatic Telephone Central Office

DUTY AREA 03 - SUPERVISION

TASK: 0614.03.01 (CORE PLUS) PERFORM SUPERVISOR OPERATING/INDEX PROCEDURES ON DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

CONDITION(S): Provided an installed and initialized Digital Central Office, Telephone, Automatic Switch and reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Perform Supervisory System Management procedures.

2. Perform Supervisory Configuration Management procedures.

3. Perform Supervisory Terminal Assignment procedures (Assign, delete, change, and display trunks and trunk groups, as required).

4. Perform Suprevisory Routing Assignment procedures.

5. Perform Supervisory Traffic Management procedures.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Sgt

REFERENCE(S):

1. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

1. * AN/TTC-42 Automatic Telephone Central Office

Appendix D to
ENCLOSURE (6)

DUTY AREA 04 - MAINTENANCE

TASK: 0614.04.01 (CORE) PERFORM OPERATOR MAINTENANCE ON THE CALL SERVICE UNIT (CSU) OF THE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

CONDITION(S): Provided a CSU in the idle state requiring operator maintenance and reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Check the operation of all console indicator lamps and audible alarms utilizing the CSU Lamp/Alarm Test button.

2. Perform CSU operational test by the call service attendant calling a subscriber.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

TRAINING MATERIEL:

1. * AN/TTC-42 Automatic Telephone Central Office

TASK: 0614.04.02 (CORE) PERFORM PREVENTIVE MAINTENANCE (PM) ON THE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

CONDITION(S): Provided a Digital Central Office, Telephone, Automatic Switch, cleaning materials, tools, and reference.

STANDARD(S): Per the reference.

PERFORMANCE STEPS:

1. Adhere to all safety procedures.

2. Perform PM procedures on the Shelter Assembly.

3. Perform PM on the Maintenance/Supervisor position.

4. Perform PM procedures on the Power Distribution Cabinet.

INITIAL TRAINING SETTING: FLC Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. TM 08789B-12/1, Digital Nonsecure Voice Terminal with Digital Data Port TA-1042A/U

Appendix D to
ENCLOSURE (6)

TRAINING MATERIEL:

1. * AN/TTC-42 Automatic Telephone Central Office

2. * Cleaning Materials, as applicable

3. Tools, as applicable

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TASK: 0614.04.03 (CORE PLUS) PERFORM OPERATOR/MAINTAINER MAINTENANCE ON THE DIGITAL CENTRAL OFFICE, TELEPHONE, AUTOMATIC SWITCH

CONDITION(S): Provided an installed and initialized Digital Central Office, Telephone, Automatic Switch, tools, and references.

STANDARD(S): Per the references.

PERFORMANCE STEPS:

1. Adhere to safety precautions.

2. Perform initial troubleshooting procedures.

3. Perform subsystem detailed troubleshooting procedures.

4. Perform unit/module detailed troubleshooting procedures.

5. Perform CCA detailed troubleshooting procedures.

6. Perform signal path detailed troubleshooting procedures.

7. Troubleshoot red switch cabinet by removing/replacing components.

8. Troubleshoot COMSEC cabinet by removing/replacing components.

9. Troubleshoot voice orderwire control unit (VOCU) console by removing/replacing components.

10. Troubleshoot power distribution cabinet by removing/replacing components.

INITIAL TRAINING SETTING: MOJT Sustainment: 12 Req By: Pvt

REFERENCE(S):

1. 29 Code of Federal Regulations, OSHA 1910.1200

2. Applicable Technical Publications/Manuals

3. TM 08440A-12/2-1, Operator and Organizational Maintenance Central Office, Telephone, Automatic AN/TTC-42(V)

4. TM 08440A-35/3, Central Office, Telephone, Automatic AN/TTC-42(V)

Appendix D to
ENCLOSURE (6)

DUTY AREA 05 - TRAINING